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APPLICATION NO.	F	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,901	-	10/01/2003	Bradley L. Grunden	1152-014A	8077
47888	7590	05/20/2005		EXAMINER	
		IGAN P.C.		MATZEK, M	ATTHEW D
1185 AVEN NEW YORI		HE AMERICAS 0036		ART UNIT	PAPER NUMBER
	- ,			1771	

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

			15
	Application No.	Applicant(s)	
	10/676,901	GRUNDEN ET AL.	
Office Action Summary	Examiner	Art Unit	
	Matthew D. Matzek	1771	
The MAILING DATE of this communication ap		ith the correspondence add	ress
Period for Reply			
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	.136(a). In no event, however, may a loby within the statutory minimum of thin will apply and will expire SIX (6) MON te, cause the application to become Al	reply be timely filed ty (30) days will be considered timely. NTHS from the mailing date of this com BANDONED (35 U.S.C. § 133).	nmunication.
Status			
1)⊠ Responsive to communication(s) filed on <u>01 (</u>	October 2003.		
,	s action is non-final.		
3) Since this application is in condition for allows	ance except for formal mat	ters, prosecution as to the r	nerits is
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D). 11, 453 O.G. 213.	
Disposition of Claims			
4)⊠ Claim(s) <u>1-22</u> is/are pending in the application	n.		
4a) Of the above claim(s) 20-22 is/are withdra			
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-19</u> is/are rejected.		•	
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/	or election requirement.		
Application Papers			
9) The specification is objected to by the Examin	er.		
10) The drawing(s) filed on is/are: a) ac	cepted or b) ☐ objected to	by the Examiner.	
Applicant may not request that any objection to the	e drawing(s) be held in abeya	nce. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the correct	· · · · · · · · · · · · · · · · · · ·	•	
11)☐ The oath or declaration is objected to by the E	xaminer. Note the attache	d Office Action or form PTC	D-152.
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreig	n priority under 35 U.S.C. {	§ 119(a)-(d) or (f).	
a) ☐ All b) ☐ Some * c) ☐ None of:			
 Certified copies of the priority document 	nts have been received.		
Certified copies of the priority document	nts have been received in A	application No	·
Copies of the certified copies of the price	·	received in this National S	tage
application from the International Burea			
* See the attached detailed Office action for a lis	t of the certified copies not	received.	
Attachment(s)			
1) Notice of References Cited (PTO-892)		Summary (PTO-413)	
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 		s)/Mail Date Informal Patent Application (PTO-	152)
Paper No(s)/Mail Date <u>all</u> .	6) Other:	* * * * * * * * * * * * * * * * * * * *	•

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DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

 Claims 1-19, drawn to an electrostatic dissipating laminate, classified in class 442, subclass 1.

II. Claims 20-22, drawn to a method of making an electrostatic dissipating laminate, classified in class 427, various subclasses.

The inventions are distinct, each from the other because of the following reasons:

- 1. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the cellulose-based structure may be drawn through the polymer resin.
- 2. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
- 3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
- 4. During a telephone conversation with Alan Clement on 5/9/05 a provisional election was made with traverse to prosecute the invention of an electrostatic dissipating laminate, claims 1-19. Affirmation of this election must be made by applicant in replying to this Office action.

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Claims 20-22 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 6. Claims 2, 4, 5, 8, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 7. Claim 2 is rejected for the use of the term "formaldehyde-type" resins. It is unclear to Examiner what is meant by "formaldehyde-type" and whether or not Applicant intends to include formaldehyde resins.
- 8. Claims 4 and 5 are rejected as it discloses limitations upon a pretreatment for the laminate, but does not disclose how this treatment or its limitations impact the final laminate structure to be instantly claimed. Applicant's limitations should be directed to the article of the instant claims not steps leading up to its creation.
- 9. Claim 8 is rejected as it is unclear as to what is meant by "heavy paper".

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10. Claim 11 is rejected as it is unclear what is meant by "dissipative polymer composition". Examiner has interpreted this limitation to mean "electrostatic dissipating polymer composition", but proper amendment is necessary.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 11. Claims 1-5, 13, 15, 16, and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Yeager et al. (PG Pub 2001/0053820).
- 12. Yeager et al. disclose a thermosetting composition, which after curing exhibits dielectric properties. The composition may comprise fibrous products such as cellulose fabrics (Kraft paper, cotton paper, and glass fiber containing paper) (para. 76). The composition may further comprise conductive agents such as tin oxide, antimony oxide, and carbon nanofibers (para. 61, 62, and 78). Polymeric fillers may also be incorporated into the applied article including polyurethanes and electrically conductive polymers, polypyrrole and polyaniline (para. 83 and 84).
- 13. The polymeric fillers may be used in amounts of about 0.005 to about 200 parts per100 parts total of the capped poly(arylene ether) or 0.005 to about 67% of the thermosetting composition (para 85, calculations performed by Examiner).
 - (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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14. Claims 1, 2, 3, 5, 12 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Dzenis et al. (US 6,265,333).

Dzenis et al. disclose a fiber reinforced composite material comprising a resin matrix and reinforcing fibers (Abstract). The applied invention may be made of epoxy or melamine-formaldehyde resins (col. 5, lines 61-67). Submicron or nanoscale carbon fibers may be used in the applied invention (col. 8, lines 40-57). Cellulosic fibers may also be incorporated into the composite of Dzenis et al. for reinforcement and may be in the form of a thin fiber mat (col. 8, lines 11-17 and col. 7, lines 32-34). The fibers included in the applied invention provide interlaminar toughness, strength, and delamination resistance (Abstract).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 16. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dzenis et al. The invention of Dzenis et al. has been previously disclosed but is silent as to the percentage of the nanoscale carbon fibers to be used in the disclosed invention.
- 17. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to make a laminate comprising nanophase materials in an amount between less than 1% and approximately 25 % by weight of the thermosetting polymer resin, since it has been held

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that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable range involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Claim Rejections - 35 USC § 102

- 18. Claims 1-7, and 13-15 are rejected under 35 U.S.C. 102(b) as anticipated by Majumdar et al. (US 6,025,119).
- 19. Majumdar et al. disclose an imaging element, which includes a support, an imageforming layer superposed on the support, and an electrically-conductive layer superposed on the
 support (Abstract). The support layer of the applied article may comprise a wide variety of
 materials including paper (col. 6, lines 63-67). The protective overcoat layer, which is
 transparent includes polyurethane (thermoset) binder (col. 3, lines 66-67). The transparency of
 the protective coating is necessitated by its use as a protective coating for an imaging element.
 The electrically-conductive layer may be formed with conductive polymers such as polypyrrole,
 polyaniline, thiophene (polyethylene dioxythiophene polystyrene sulfonated), and
 polyisothianapthene (col. 10, lines 23-36, col. 12, lines 31-36). It is preferred that the conductive
 polymers are dispersed in aqueous systems (col. 10, lines 35-37).

Claim Rejections - 35 USC § 102/103

- 20. Claims 1-8, and 17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nakajima et al. (US 6,261,995).
- 21. Nakajima et al. disclose an intermediate transfer material comprising a support 1, back coat layer 2, cushion layer 3, light-heat converting layer 4, ink layer 5, releasing layer 6 (col. 2, lines 30-40 and Figure 1). The support may be a coated paper laminate (col. 7, lines 39-45). To attain the surface specific resistance of the back coat layer in the fixed range of the applied

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invention an anti-static agent of fine particles of tin oxide may be used (col. 7, lines 59-64). The applied invention is silent as to the size of the "fine particles" but it is reasonable to presume that the tin oxide particles are of a nanoscale or it would have been obvious to one of ordinary skill in the art to have used nanoscale tin oxide particles. Particles of a larger diameter would have adversely affected the aesthetics of the final image for which the transfer material is designed. The binder of the back coat layer may be an epoxy resin or fluorinated polyurethane (col. 8, lines 26-37). The cushioning layer may be a phenol-formaldehyde resin (col. 9, lines 40-67).

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- 22. Claims 1-3, 9-11, and 17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Follensbee et al. (US 6,239,049).
- 23. Follensbee et al. disclose a backing substrate for use in coated abrasives (Abstract). The backings of the invention may be comprised of paper and nonwoven materials including coated multilayer combinations thereof (col. 8, lines 48-54). Nonwoven backings include scrims (col. 9, lines 19-31). Paper backings may be barrier coated or backsized with thermoset polymers (claim 15). Antistatic additives such as carbon black and graphite may be included in the applied invention (col. 8, lines 43-46).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Matzek whose telephone number is (571) 272-2423. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mdm MM